

Heavy Duty
Bilge Pump

1600-4000 GPH

Heavy Duty Bilge Pump

SUBMERSIBLE BILGE PUMP
1600, 2200, 4000 GPH

52283 R01
(11/2018)

ORIGINAL INSTRUCTIONS/TRANSLATION OF ORIGINAL INSTRUCTIONS
READ AND UNDERSTAND THIS MANUAL PRIOR TO OPERATING OR
SERVICING THIS PRODUCT

SPXFLOW JOHNSON PUMP of 5885 11th Street Rockford, Illinois 61109 warrants to the original consumer purchaser that this bilge pump will be free from defects in material and workmanship, providing that the case is not opened or the pump otherwise abused for a period of 3 years from the date originally purchased.

The exclusive remedy of the consumer purchaser in the the event the product does not meet this express Limited Warranty is to return the pump to Johnson Pump at the above address, freight prepaid with your sales receipt and \$2.50 to help defray the cost of postage and handling. **IMPORTANT: FOR THIS WARRANTY TO BE EFFECTIVE, JOHNSON PUMP MUST BE SUPPLIED WITH THE ORIGINAL PURCHASE DATE OF THE PUMP. THE ACCEPTANCE BY JOHNSON PUMP OF ANY PUMP RETURNED SHALL NOT BE DEEMED AN ADMISSION THAT SUCH PUMP IS DEFECTIVE OR IN VIOLATION OF ANY WARRANTY. THE COMPANY RESERVES THE RIGHT TO REPAIR OR REPLACE THE PUMP.**

NO REPRESENTATIVE OR OTHER PERSON IS AUTHORIZED TO ASSUME FOR JOHNSON PUMP ANY ADDITIONAL LIABILITY IN CONNECTION WITH THE SALE OF ITS PRODUCTS OR TO ALTER THIS WARRANTY IN ANY WAY.

IN NO EVENT WILL JOHNSON PUMP BE LIABLE FOR MORE THAN THE SALES PRICE OF THE PUMP. UNDER NO CIRCUMSTANCES WILL JOHNSON PUMP BE LIABLE FOR ANY LOST PROFITS, INCIDENTAL OR CONSEQUENTIAL COSTS, EXPENSES, OR DAMAGES. THE LIMITATION ON LIABILITY FOR LOST PROFITS, INCIDENTAL OR CONSEQUENTIAL COST EXPENSES OR DAMAGES SHALL SURVIVE ANY FAILURE OF ESSENTIAL PURPOSE OF THIS LIMITED WARRANTY. Some states do not allow the exclusive or limitation of incidental or consequential damages, so the above limitation may not apply to you.

NO EXPRESS OR LIMITED WARRANTY, INCLUDING WARRANTY OF MERCHANTABILITY AND FITNESS SHALL EXTEND FOR ANY PERIOD OF TIME GREATER THAN 18 MONTHS FROM THE DATE OF ORIGINAL PURCHASE OF THIS PRODUCT. Some states do not allow limitation on how long an implied warranty lasts so the above limitation may not apply to you.

CAUTION - Warranty void if seal on pump is broken, if any electric cord is cut back more than 3 inches, if electric splices become submerged, or if pump is installed contrary to instructions or warnings.

Bilge Pumps are designed to exhaust standing water only. These pumps are not intended for damage control. Bilge Pump capacities may not be sufficient to prevent flooding from rapid accumulation of water due to storms, rough weather and/or rapid leaks created by hull damages or unsafe navigational conditions.

Diagram 1: Ultima Switch

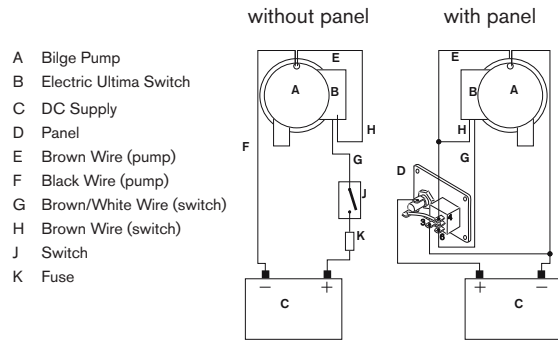


Diagram 2: Ball Float Switch

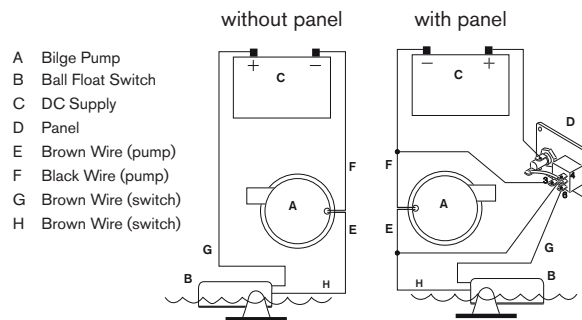
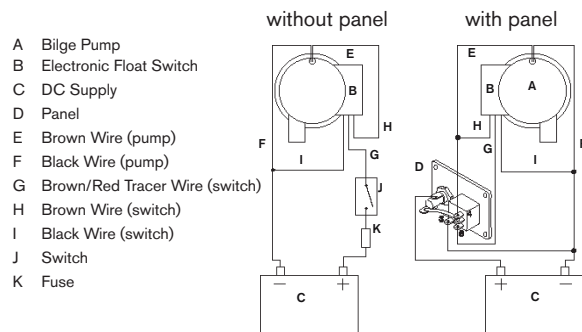


Diagram 3: Electronic Float Switch



SPXFLOW



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Assembled in USA

RELIABILITY ON BOARD

-SINCE 1968-

Customer Service & Support

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For more information about our worldwide locations, approvals, certifications, and local representatives, visit Johnson Pump - Marine at www.spxflow.com

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52283 R01 (ISSUED 11/2018)
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Submersible bilge pump for pumping bilge water in marine environment. To be installed in the keelson.

SECURITY

- The pump may not be used for other liquids than water/bilge water
- Always install the pump according to the wiring diagram.
- Always use the fuse required, see “Design Features”
- The wire connections must be sealed with a marine sealant.
- Insulation or cable sheathings must be placed above the highest bilge water level.
- Do not run dry.

Type designation

Pump type	Part No.
1600 12V	16004-00
1600 24V	16084-00
2200 12V	22004
2200 24V	22084
4000 12V	40004
4000 24V	40084

INSTALLATION:

Please follow the installation instructions carefully to ensure maximum efficiency in your bilge pump operation.

1. Remove the strainer from the bottom of the pump by depressing the lock tabs on both sides of the pump.

2. Determine the desired location for the pump. Usually it is placed in the lowest point of the bilge.
3. Position the strainer so that the pump nozzle is in the proper position to connect the discharge hose.
4. Mount the strainer. If attaching the strainer to wood, fasten with stainless steel screws. If attaching the strainer to metal or fiberglass, first mount a wooden block and then fasten the strainer to the wooden block.
5. Mount the pump on the strainer so that both locktabs “snaps” into place.
6. Select a point where the bilge water is to be pumped overboard as high as possible above the water line and at the shortest distance to the pump. Install a 1 1/8” or 1 1/4” thru-hull fitting for 1600/2200 pump, or install a 1 1/2” or 2” thru-hull fitting for 4000 pump.

Note: The 4000 pump comes equipped with an integrated check valve to minimize back flow of water, however, over time water will seep back into the hull when the pump is not running. The use of flapper check valve will reduce maximum flow performance.

7. Fasten a 1 1/8” or 1 1/4” fuel resistance hose from pump outlet to the thru-hull fitting for 1600/2200 pump. For 4000 pump, use 1 1/2” or 2” hose. Avoid sharp bends or loops. Support the hose if necessary.
Note: In order to prevent air locks it is important that the hose is not to be allowed to dip below the pump outlet. The hose should be constantly rising.
8. Connect the brown wire to the positive (+) terminal of the battery, and the black wire to the negative (-) terminal of the battery. See wiring diagram.

9. Important: All electrical wiring must be clamped with the connections well above the bilge water level. Do not remove the insulation more than necessary. All wiring connections should be sealed with a marine sealant to avoid oxidation.

MAINTENANCE:

Regularly check the pump to be sure that the filter base and impeller are not clogged with debris. To clean, push in the tabs and lift up the pump housing. Note: The discharge hose need not be removed.

Accessories

3-way ON-AUTO-OFF Panel 12V or 24V

Part No: 82044 (12V)
82044-24V (24V)

2-way ON-OFF Panel 12V or 24V

Part No: 82004 (12V)
82004-24V (24V)

Electrical installation with the SPX FLOW Johnson Pump panel

Always install according to the wiring diagram.

Ultima Switch - Electronic Automatic Switch

Part No: 36303 (12V/24V)

Bilge Alert (High Water Alarm) + Ultima Switch

Part No: 72303-001 (12V)
72303-002 (24V)

Bilge Alert (High Water Alarm) with sensor

Part No: 72303 (12V)

Electro-Magnetic Float Switch

Part No: 36152 (12V)
36252 (24V)

Automatic Float Switch AS888

Part No: 26104 (6-32V)

Design Features	1600	2200	4000
Hose size:	1 1/8" or 1 1/4"	1 1/8" or 1 1/4"	1 1/2" or 2"
Capacity, straight (13.6V/27.2V):	100 l/min (1600 GPH)	130 l/min (2060 GPH)	252 l/min (4000 GPH)
Capacity, 0.9m (3ft) head (13.6V/27.2V):	981/min (1550 GPH)	1201/min (1900 GPH)	1641/min (2600 GPH)
Voltage:	12/24V DC	12/24V DC	12/24V DC
Amperage:	12V – 7A 24V – 3.5A	12V – 7.5A 24V – 4.5A	12V – 15A 24V – 7.5A
Fuse Size:	12V – 10A 24V – 6A	12V – 12A 24V – 6A	12V – 25A 24V – 15A
Body:	Thermoplastic	Thermoplastic	Thermoplastic
Shaft:	SS2343	SS2343	SS2343
Shaft seal:	Lip seal	Mechanical seal carbon/ceramic	Mechanical seal carbon/ceramic
Wire size:	16 GA (1.3mm ²)	16 GA (1.3mm ²)	14 GA (2mm ²)
Max Height:	149 mm / 5.86 in	177 mm / 7.00 in	216 mm / 8.50 in
Max dia:	108 mm / 4.25 in	108 mm / 4.25 in	121 mm / 4.80 in
Weight:	1.3 kg / 2.75 lbs	2.25 kg / 4.96 lbs	2.45 kg / 5.40 lbs